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David Gray
Acting Regional Administrator
U.S. Environmental Protection Agency
Region 6
1201 Elm Street, Suite 500
Dallas, Texas 75270

December 6, 2021

Dear Acting Administrator Gray:

We write to express two significant concerns with the ongoing CERCLA remediation process at the Homestake/Barrick Gold (HBG) Superfund site. In particular, we are concerned that Region 6 will allow HBG to walk away from its groundwater restoration obligations[1] by obtaining a Technical Impracticability (TI) waiver. Second, we are frustrated with Region 6's lack of community engagement efforts during its Remedial Investigation and Feasibility Study (RI/FS) process for the Homestake Superfund site.

BACKGROUND

The Homestake Mill was a conventional uranium mill located in Cibola County, New Mexico, which operated from 1958 to 1990. Mill operations and later decommissioning activities took place within several hundred yards of five residential subdivisions: Felice Acres, Broadview Acres, Murray Acres, Pleasant Valley Estates, and Valle Verde. Despite being placed on CERCLA's National Priorities List in 1983, EPA has not yet completed an RI/FS for groundwater remediation or the long-term stability of the tailings. The large tailings pile contains 21 million tons of toxic radioactive waste, and the small tailings pile contains 1.2 million tons of waste. Neither tailings pile is lined or completely covered, which allows the continual seepage of contaminants into groundwater, virtually in perpetuity.

In 1975, residents of the nearby residential subdivisions were notified that their domestic wells were contaminated with high concentrations of selenium and other contaminants associated with milling operations. The New Mexico Environment Department (NMED) advised residents to discontinue use of their wells in 2009. Since site reclamation activities began, HBG and its predecessor operators have experimented with novel groundwater cleanup actions, such as flushing the large tailings pile with fresh water and the use of regional groundwater for hydraulic control of the contaminant plumes from the large tailings pile, along with hundreds of injection/extraction wells to "pump and treat" the affected

[1] 10 CFR Part 40 Appendix A, Criterion 5F: Where groundwater impacts are occurring at an existing site due to seepage, action must be taken to alleviate conditions that lead to excessive seepage impacts and restore groundwater quality.

groundwater. These groundwater "restoration" efforts, in combination with existing groundwater contamination, have spread contamination from the tailings into a total of four aquifers (the alluvial, Upper Chinle, Middle Chinle and Lower Chinle). We also fear that HBG's contamination and poorly designed cleanup methods may have contaminated the region's only fresh water aquifer – the San Andres-Glorieta – which supplies the downgradient municipalities of Milan and Grants, and serves as an alternative drinking water source for the five neighboring residential subdivisions.

MASE CONCERNS REGARDING HBG'S ANTICIPATED TI WAIVER APPLICATION

Rather than meaningfully address its ongoing failure to restore groundwater, HBG has publicly stated its intention to seek a TI waiver from EPA Region 6 and Alternative Concentration Limits (ACLs) from the U.S. Nuclear Regulatory Commission, the lead regulator for radioactive byproduct material at the Homestake Superfund site. As MASE explained to the EPA's National Remedy Review Board (NRRB) earlier this year in a series of memos, attached, we have several well-founded technical concerns with groundwater restoration efforts to date and HBG's anticipated TI waiver application.

In short, under no circumstances should EPA consider, much less grant, a TI waiver application from HBG at this time. Through the decades, HBG has proposed, and EPA and NRC have sanctioned, multiple groundwater cleanup methods, including the dilution of contaminants with fresh water from the San Andres-Glorieta aquifer, but have discounted the remedies that are most likely to provide long-term effectiveness such as dewatering the tailings and source removal.

As Dr. Maest explains in her attached memo to the NRRB, Region 6 has inappropriately discounted source removal as a remedy in its consideration of the Homestake Groundwater Corrective Action Plan (GCAP), despite EPA's own guidance on groundwater restoration and common sense. Maest Memo at 3, fn 8; U.S. EPA, *Guidance for Evaluating the Technical Impracticability of Ground-Water Restoration* at 19-20 (1993). Instead of requiring source removal at the outset, the EPA has fallen in lockstep with HBG's questionable remediation activities over the last 32 years, as set forth in several versions of its GCAP since 1989. Those activities have spread groundwater contamination offsite in multiple aquifers. The communities demand that Region 6 reject any attempt by HBG to walk away from the groundwater contamination sourced from its unlined tailings piles and other related facilities such as evaporation ponds. HBG must be held accountable for the offsite groundwater contamination it has spread and for the GCAP versions it has proffered to the NRC since 1989.

The communities further demand that EPA require HBG begin the process of removing both the large and small tailings piles to a lined repository with state-of-the-art covers and leak detection systems. Any remedy short of source removal will not meet the criteria of isolating the source of contamination or protecting nearby communities and their drinking water supplies over the long term.[2] The long-term stability of the tailings piles in the San Mateo Creek Basin is also problematic because the western edge of the unlined large tailings pile sits on top of San Mateo Creek and the associated alluvial aquifer, which serves as a preferential flow path for tailings seepage.

We are not alone in our contention that source removal is the best remedy to protect public health and the environment. The EPA's own NRRB recommended that Region 6 and the NRC seriously consider

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[2] 10 CFR Part 40, Appendix A, Criteria 5A and 5E.

alternative source control measures including removal of the Homestake tailings to a centralized repository or consolidation of the tailings with wastes at other Homestake sites.[3] The NRRB also urged Region 6 to consider moving the tailings materials to a lined cell at the current Homestake Mill site. The NRRB concluded this would significantly reduce, or eliminate entirely, the risk of continued groundwater contamination from the tailings piles. Importantly, the US EPA also notes the "disproportionate impact of site-related contamination and potential environmental justice concerns related to cleanup approaches" in the NRRB memorandum.[4] The NRRB memorandum is attached for your reference.

The goal of groundwater restoration under CERCLA is restore groundwater for beneficial use whenever practicable. National Contingency Plan, § 300.430(a)(1)(iii)(F). A re-evaluation of background uranium and selenium concentrations in the alluvium and the Upper, Middle and Lower Chinle aquifers at the Homestake Superfund site, indicates that the groundwater quality of these aquifers was likely suitable for drinking water or agricultural use, and private wells in those aquifers were in fact used for those purposes.[5] Currently, the NMED is also re-evaluating background concentrations in the alluvial and Chinle aquifers, and we anticipate that its findings will be similar to those of Dr. Maest and Dr. Meyer. Because one of CERCLA's primary goals is to restore groundwater to meet pre-mining background water quality, Region 6 should focus on the feasibility of removing the mill tailings at the Homestake site so that restoration of the contaminant plumes will be effective over the long-term – which cannot occur with a perpetual stream of contamination being released from the tailings piles.

MASE'S COMMUNITY ENGAGEMENT CONCERNS

A secondary, but related, concern we have is Region 6's inadequate community engagement efforts. Region 6 has failed to solicit any community involvement or provide updates about the Homestake RI/FS process[6] since January of 2020. This lack of engagement has led to the exclusion of public input from the communities most impacted by Region 6's selection of potential remedies for groundwater cleanup as part of the RI/FS. This is an environmental injustice.

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[3] US EPA, 2021. Homestake NRRB Recommendations for the Homestake Mining Site. Feasibility Study Scoping Meeting, June 15 (attached). Recommendations, a.vi, p. 10-11.

[4] *Id*. at 10. Environmental Justice, p. 12.

[5] Dr. Ann Maest's groundwater quality re-evaluation report is available at: https://swuraniumimpacts.org/wp-content/uploads/2021/03/20.03-Maest-Background-Study.pdf. Dr. Tom Meyer's groundwater re-evaluation report is available at: https://swuraniumimpacts.org/wp-content/uploads/2021/03/20.03-Myers-Background-Report.pdf.

[6] Region 6's community engagement and involvement about Homestake's groundwater reclamation has been virtually non-existent. On February 1, 2021, MASE sent a letter to Mr. Mark Purcell formally requesting to be included in the San Mateo Creek Basin remediation process. MASE noted that front line communities had not been informed, much less consulted, as Region 6 negotiated the settlement agreement and consent order with 10 uranium mining companies that established the San Mateo Creek Basin Groundwater Site Central Study Area. Since MASE wrote that letter, information and consultation from Region 6 has been sporadic at best. Indeed, Region 6 has not even shared information about its 2021-2025 Five-Year Plan for the Grants Uranium Mining.

Most recently, MASE attempted to work with Region 6 to set up a meeting to discuss EPA's RI/FS process. That attempt initially began with correspondence between MASE Coordinator Susan Gordon, Region 6 staffer Blake Atkins, and Region 6 Community Involvement Coordinator Adam Weece in April 2021. After substantial discussion between MASE and Region 6 regarding the propriety of having discussions with MASE's legal counsel present, MASE and Region 6 agreed to a meeting date. However, Region 6 asked to reschedule that meeting date, and MASE is still attempting to get a meeting with Region 6 to this day. MASE's efforts have been made even more challenging because the Community Involvement Coordinator has been unresponsive to MASE's outreach efforts since September. As a result, EPA has not had <u>any</u> community meetings with MASE in 2021.

Region 6 has made no attempt to involve our communities throughout the RI/FS process, as promised during its last Community Meeting Update in January 2020. Nor were we advised about the selection of groundwater Applicable or Relevant and Appropriate Requirements (ARARs) for the San Mateo Creek Basin (SMCB)'s Central Study Area or at the Homestake site, despite the long-term impacts of groundwater contamination and the selection of groundwater "protection" standards on nearby communities and other communities farther downgradient and downwind from the SMCB and the Homestake Superfund site. Rather than being marginalized or ignored, these frontline communities should be a driving force in selecting remedies that will provide long-term protection of their last uncontaminated drinking water source (the San Andres-Glorieta aquifer) and survival of their communities into the future.

Thank you for your prompt attention to the concerns we have raised. We look forward to increasing the opportunities for community engagement in your re-evaluation of background water quality and remedy selection at the Homestake Superfund site.

Sincerely,

Susan R Gordon

Susan Gordon
Coordinator, Multicultural Alliance for a Safe Environment

Cc: Senator Martin Heinrich
Senator Ben Ray Lujan
Representative Theresa Fernandez-Leger
Michael Regan, Administrator, United States EPA
Richard Moore, Chair, White House Environmental Justice Advisory Committee
Carletta Tilousi, Vice Chair, White House Environmental Justice Advisory Committee
Jonathan Perry, EPA National Environmental Justice Advisory Committee member
Scott Clow, EPA National Environmental Justice Advisory Committee member
Valinda Shirley, Executive Director Navajo Nation EPA and USA EPA Local Government Advisory Committee Member
Christine Lowery, Cibola County Commissioner and USA EPA Local Government Advisory Committee Member
Ron Linton, NRC, Homestake Project Manager
Kurt Vohlbrecht, Ground Water Quality Bureau, New Mexico Environment Department